

Claim 43 (currently amended) A p-n-p configuration electroluminescent (EL) device, comprising successively layers, of:

a *p*-type silicon layer on insulator substrate, comprising thin doped Si *p/p+* regions separated by insulating regions, such as SiO<sub>2</sub>, wherein said *p+* regions are contacted to form bottom electrodes;

a thin-layer of Si which allows further epitaxial growth;

a *p<sup>+</sup>*-type Si layer, having addressing contact electrodes;

a thin (about 10 nm) SiO<sub>2</sub> layer deposited and patterned with a pitch of about 0.1 microns;

a *n*-Si layer forming nanotips;

an *n*-type wide energy gap layer selected from the group of semiconductors consisting of Zn<sub>a</sub>Mg<sub>1-a</sub>Se, Zn<sub>a</sub>Mg<sub>1-a</sub>S, Zn<sub>a</sub>Mg<sub>1-a</sub>S<sub>b</sub>S<sub>1-b</sub>, Zn<sub>a</sub>Be<sub>1-a</sub>S<sub>b</sub>S<sub>1-b</sub>, Al<sub>c</sub>Ga<sub>1-c</sub>N, ZnMgBeSe, and AlInN, stacked on layer with nanotips;

a layer comprising cladded quantum dots;

a *p*-type wider energy gap (than said wide *p*- wide energy gap layer) semiconductors layer selected from the group of semiconductors consisting of: Zn<sub>a</sub>Mg<sub>1-a</sub>Se, Zn<sub>a</sub>Mg<sub>1-a</sub>S, Zn<sub>a</sub>Mg<sub>1-a</sub>S<sub>b</sub>S<sub>1-b</sub>, Zn<sub>a</sub>Be<sub>1-a</sub>S<sub>b</sub>S<sub>1-b</sub>, Al<sub>c</sub>Ga<sub>1-c</sub>N, ZnMgBeSe, and AlInN; and

a layer forming contact electrodes, wherein said set of electrodes being appropriately biased and addressed to create a two-dimensional display.

Claim 44 (previously amended) The EL device as described in claim 1, wherein the electrodes at the bottom of the device are separated by reverse biased junctions.

#### REMARKS

Claims 1 and 38-44 have been rewritten.

The Examiner rejected claims 1-3, 5-8, 10-16, 18, 20, 25-27, 29 and 38-44 under 35 USC 112 as containing subject matter which was not described in the specification. The Examiner cited that the term "p-doped" was not described in the specification and the "desired pixels" is indefinite. The term "p-doped" has been corrected as p-type and the word "desired" has been deleted.

The Examiner objected to the underlines in the clean copy of the previous amendment. Since a clean copy is no longer necessary, only a marked-up copy is submitted herewith.

The Examiner objected to claims 42 and 43, because "they are not in proper form" and "should not depend on claim 1". Claims 42 and 43 have been rewritten as independent claims.

The Examiner objected to claim 11, because the term "first p-doped Si" is no longer present in the amded claim 1. The word "first" has been deleted.

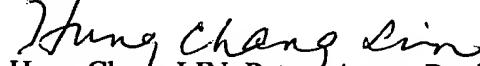
The Examiner objected to claims 38 and 42 for the words "comprising of". these words have been replaced by comprised of as suggested by the Examiner.

The Examiner rejected claims 1-3, 5-8, 10-16, 18, 20, 25-27, 29 and 38-44 under 35 U.S.C. 112 as containing subjected matter which was not described in the specification. Specifically:

"latticed-matched" not defined; "thin layer of Si relative to the substrate" in claim 1 not set forth until later; "elastometric spacer" in claims 39, 40 not antecedent basis; "such as" in claim 41 not clear; "low" in claim 38 not defiend. To overcome the rejections: "lattice-matched" has been corrected as lattice-matching and in claim 1; "thin layer of Si relative to" has been changed to thin layer of Si thinner than; "the wide energy gap relative to the chadded nanacrystals (CNC)" on line 7 of claim 1 has been deleted; "elastometric spacer" in claims 3, 40 has been changed to spacers, which are made of hole transporting viscous composite; "such as" in claim 41 has been changed to selected from the group consisting of; and "low" in claim 38 has been changed to lower than atmospheric. With these changes, it is believed that the rejections have been overcome. Since, claims 2-3, 5-8, 1-16, 18, 20, 25-27, 29 and 38-42 are dependent claims of claim 1 and claim 1 has been amended to overcome the rejections, it follows that the dependent claims are also no longer indefinite.

In view of the above, it is submitted that claims 1-3, 5-8, 10-16, 18, 20, 22, 25-27, 29 and 38-44 are in condition for allowance. Reexamination of the objections and rejections is requested. Allowance of these claims at an early is solicited.

Respectfully submitted,



Hung Chang LIN, Patent Agent, Registration No.28789  
8 Schindler Court, Silver Spring, MD 20903  
Telephone: 301-434-3571

Certificate of Mailing

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above on the date indicated below.

Hung Chang LIN	(Depositor's name)
Hung Chang Lin	(Signature)
6/30/03	(Date)